EML

Environmental Measurements Laboratory

"A Federal Resource"

ISDMAP

ISDMAP

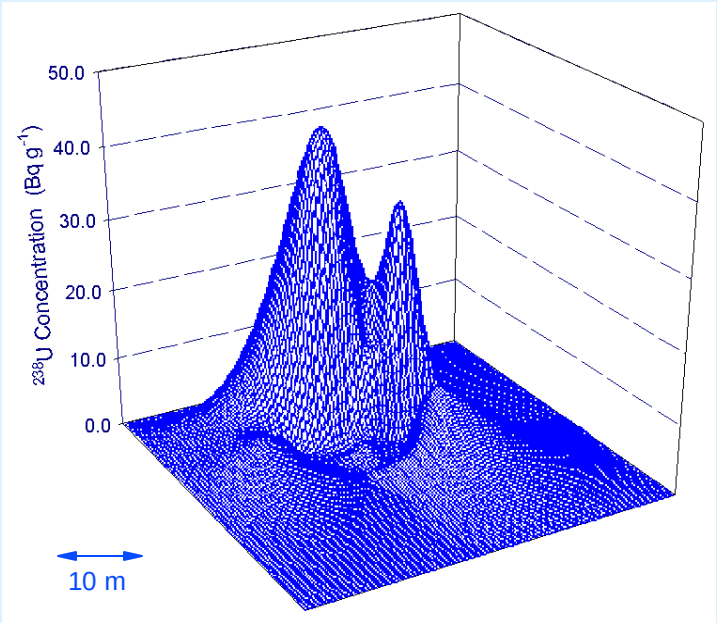
A computer program for the analysis of *in situ* gamma-ray spectrometric measurements on a grid, and mapping of radionuclide contamination in surface soil.

- Analyzes nuclide specific data from a series of *in situ* gamma-ray spectrometric measurements on a grid
- Can combine data from soil samples with data from *in situ* gamma-ray spectrometry

Two types of analysis:

A. For the evaluation of the data when the main objective is to get a best estimate of the distribution of the contaminant. This is useful, for example, during characterization surveys.

B. For the evaluation of the data when the main objective is to find the location and magnitude of potential areas of elevated activity (or "hot spots") that might be hidden in the data. This is useful, for example, for final status surveys after remediation, and provides an alternative to the standard methods of detecting "hot spots".



An example of the use of ISDMAP to get a best estimate of the distribution of the contaminant. Mapping of depleted uranium (DU) in soil using data from 19 *in situ* spectrometric measurements taken at 1m above the ground and 8 soil samples.

Contact: Marcel Reginatto
☎ *Voice: 212-620-3634*
💻 *E-mail: mreg@eml.doe.gov*

Seleted EML Publications

- P. Shebell, M. Reginatto, M. Monetti, S. Faller and L. Davis, "Mapping of Depleted Uranium With *In Situ* Spectrometry and Soil Samples", Proceedings of the International Symposium on Restoration of Environments with Radioactive Residues, IAEA-SM-359, Arlington, VA (1999).
- M. Reginatto, P. Shebell and K. M. Miller, "An Alternative Approach to Hot Spot Identification Using *In Situ* Gamma Spectrometry Measurements on a Grid", Health Phys. 74, 481-485 (1998).
- M. Reginatto, P. Shebell and K. M. Miller, "ISD97, A Computer Program to Analyze Data from a Series of *In Situ* Measurements on a Grid and Identify Potential Localized Areas of Elevated Activity", USDOE Report EML-590, (1997).